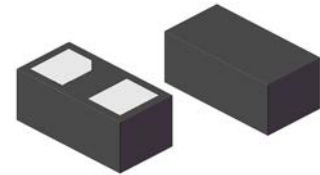


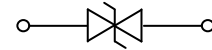
GSEN5B025 ESD Protection Diode

Features

- Bi-directional transient voltage suppressor
- Low leakage
- Response time is typically < 1 ns
- IEC61000-4-2 level 4 ESD protection
- UL-94 V-0 / Green EMC



DFN0603



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Units
ESD Voltage IEC61000-4-2 Air	V _{ESD} - Air	±25	kV
ESD Voltage IEC61000-4-2 Contact	V _{ESD} - Contact	±20	kV
Peak Pulse Power (8/20µs)	P _{PK}	60	W
Junction Temperature	T _J	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150	°C
Peak Pulse Current (8/20µs)	I _{PP}	3.0	A

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Peak Voltage	V _{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	6.0	7.5	9.0	V
Reverse Current	I _R	V _{RWM} =5V	-	-	0.5	µA
Clamping Voltage	V _C	I _{pp} =1A (8x20µs pulse)	-	-	12	V
Clamping Voltage	V _C	I _{pp} =3A (8x20µs pulse)	-	18	20	V
Capacitance	C	V _R =0V, f=1MHz	0.2	0.25	0.3	pF

Ratings and Characteristics Curves

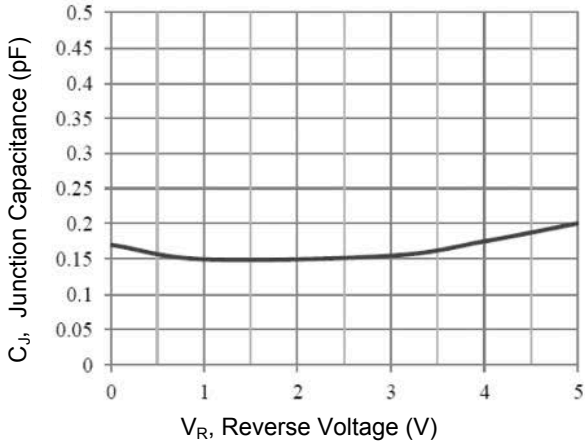


Figure 1. Junction Capacitance vs. Reverse Voltage

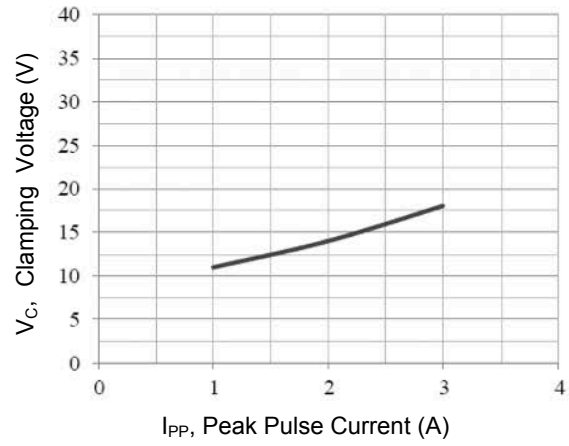


Figure 2. Clamping Voltage vs. Peak Pulse Current

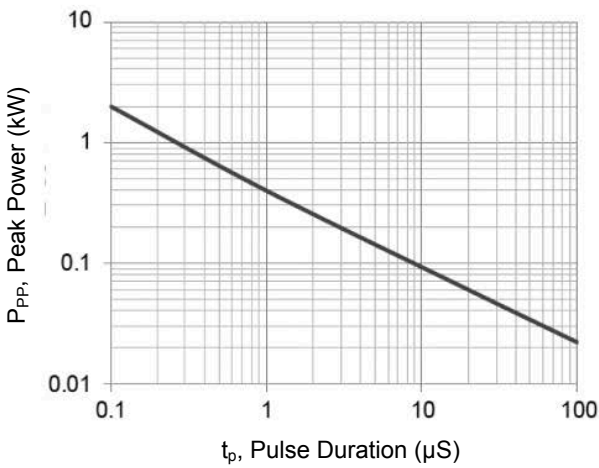


Figure 3. Peak Pulse Power vs. Pulse Time

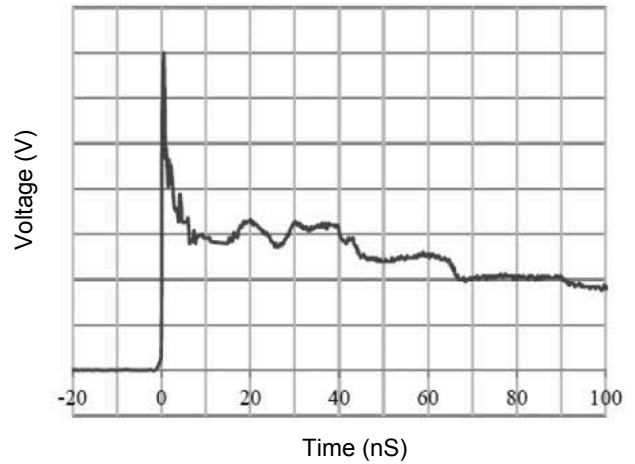


Figure 4. IEC61000-4-2 Pulse Waveform

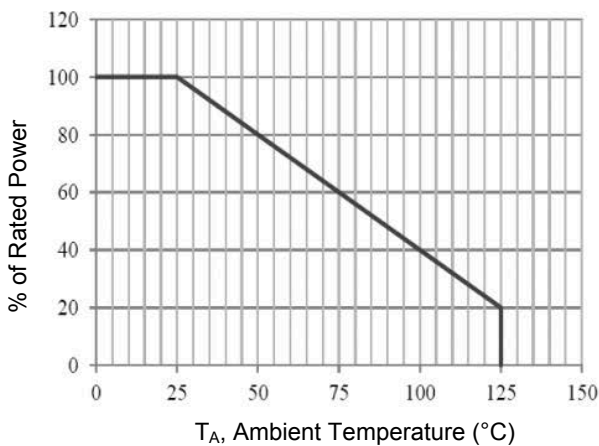


Figure 5. Power Derating Curve

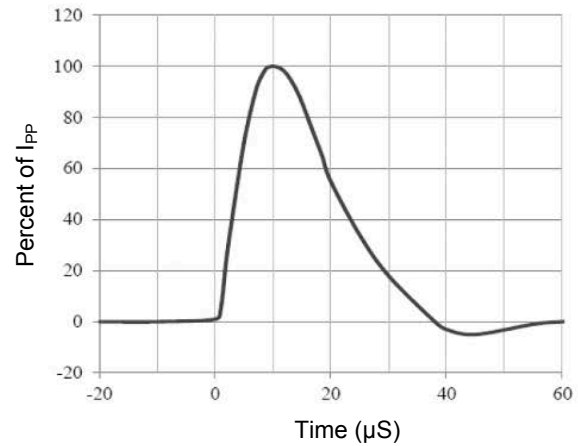
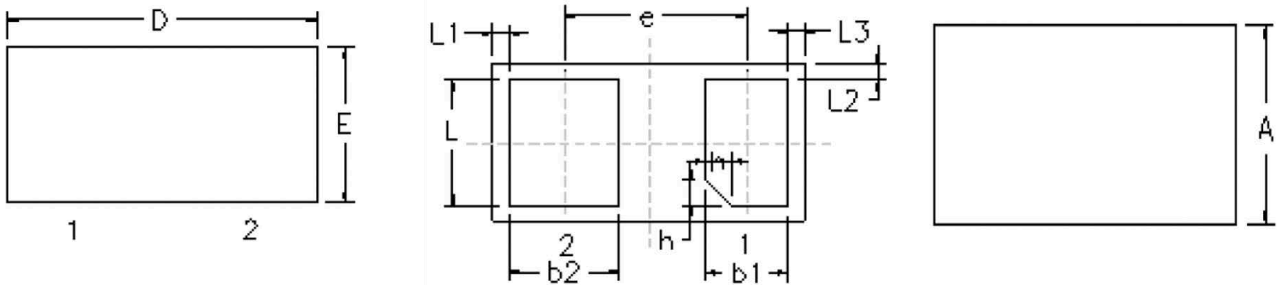


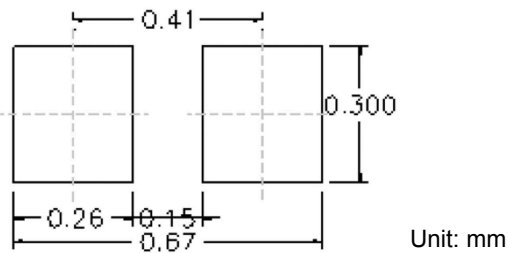
Figure 6. Pulse Waveform-8/20 μS

Package Outline Dimensions (DFN0603)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.280	0.320	0.011	0.013
b1	0.130	0.230	0.005	0.009
b2	0.140	0.240	0.006	0.009
D	0.550	0.650	0.022	0.026
e	0.350 BSC		0.014 BSC	
L1	0.030 BSC		0.001 BSC	
L2	0.025 BSC		0.001 BSC	
L3	0.035 BSC		0.001 BSC	
E	0.250	0.350	0.010	0.014
L	0.200	0.300	0.008	0.012
h	0.000	0.100	0.000	0.004

Recommended Pad Layout



Order Information

MPN	Package	Marking	Quantity	HSF Status
GSEN5B025	DFN0603	N	15,000pcs / Reel	RoHS compliant